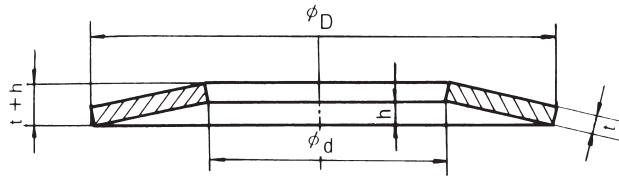


Disc Springs For Light Duty

DIN 2093
JIS B 2706 (Ref.)



Series $\frac{D}{t} \doteq 28$, $\frac{h}{t} \doteq 0.75$

Unit : mm

Nominals	Dimensions Code	Nominals	Nominals non-defunct	Internal Diameter		External Diameter		Thickness	Height				f=0.75h(Ref.)		
				d	Tolerance	D	Tolerance		t	h	t+h	Tolerance	Spring Force P N	Deformed Length =0.75h mm	Maximam Stress σ N / mm ²
JIS 10	23001	Nb. 2	JIS 5	4.2	+0.15 0	8	0 -0.15	0.3	0.25	0.55	±0.1	117.7	0.19	1,314.1	
	23002		5.2	10			0.4	0.3	0.7	205.9		0.22	1,284.7		
12.5	23003	3	6	6.2		12.5	0 -0.2	0.5	0.35	0.85		294.2	0.26	1,108.2	
14	23004	4	7	7.2		14		0.5	0.4	0.9		274.6	0.3	1,098.3	
16	23005	5	8	8.2		16		0.6	0.45	1.05		411.9	0.34	1,108.2	
18	23006	6	9	9.2		18		0.7	0.5	1.2		568.8	0.37	1,108.2	
20	23007	7	10	10.2		20		0 -0.25	0.8	0.55		1.35	745.3	0.41	1,118.0
22.5	23008	8	11	11.2		22.5			0.8	0.65		1.45	706.1	0.49	1,078.7
25	23009	9	12	12.2		25	0.9		0.7	1.6		863.0	0.52	1,019.9	
28	23010	10	14	14.2		28	1		0.8	1.8		1,127.8	0.6	1,108.2	
※ 31.5	23011	11	16	16.3	31.5	0 -0.3	1.25	0.9	2.15	1,912.3	0.67	1,186.6			
※ 35.5	23012	12	18	18.3	35.5		1.25	1	2.25	1,696.6	0.75	1,068.9			
※ 40	23013	13	20	20.4	40		1.5	1.15	2.65	2,618.4	0.86	1,137.6			
※ 45	23014	14	22	22.4	45		1.75	1.3	3.05	3,648.1	0.97	1,147.4			
50	23015	15	25	25.4	50		2	1.4	3.4	4,765.2	1.05	1,147.4			
56	23016	16	28	28.5	56	0 -0.35	2	1.6	3.6	4,462.0	1.2	1,098.3			
63	23017	17	30	31	63		2.5	1.75	4.25	7,207.9	1.3	1,088.5			
71	23018	18	35	36	71		2.5	2	4.5	6,717.6	1.5	1,049.3			
80	23019	19	40	41	80		3	2.3	5.3	10,493	1.7	1,137.6			
90	23020	20	45	46	90	0 -0.4	3.5	2.5	6	14,122	1.87	1,108.2			
100	23021	21	50	51	100		3.5	2.8	6.3	13,092	2.1	1,049.3			
112	23022	22	—	57	+0.6 0	112	0 -1	4	3.2	7.2	+0.55 -0.25	17,770	2.4	1,088.5	
125	23023	23	—	64		125		5	3.5	8.5		29,930	2.6	1,147.4	
140	23024	24	—	72	+1 0	140	0 -1.2	5	4	9	+0.6 -0.25	27,949	3	1,098.3	
160	23025	25	—	82		160		6	4.5	10.5		41,011	3.3	1,108.2	
180	23026	26	—	92	+1.2 0	180	0 -1.5	6	5.1	11.1	+0.7 -0.35	37,569	3.8	1,039.5	
200	23027	27	—	102		200		8	5.6	13.6		76,364	4.2	1,147.4	
225	23028	28	—	112		225		8	6.5	14.5		70,706	4.8	1,078.7	
250	23029	29	—	127	250	10	7	17	118,955	5.2	1,137.6				

- Remarks**
1. Spring force of SUS304 will be approx. 90% of above mentioned of Spring Steel.
 2. Maximum stress is determined by the value of the maximal tensile stress that occurs at the bottom fringe of the disc spring.
 3. ※: Height, thickness and other specifications are different from JIS.
 4. Refer to technical information at the end of this book "page T3 and 4".

- Notes**
1. Equate quality of stainless material with SUS-304CSP when thickness was not specified within JIS (JIS G 4313 Stainless Spring Steels).
 2. Please contact us if any inquiry of Stainless Steel over 6 mm thickness. This thickness is a special supply.

Product code	123	Material code	02...SUS304-CSP		Part Number Structure (Standardized Product Code)									
			70...Spring Steel		Product	Surface								
Surface code	01...Burnished (SUS304-CSP)	Hardness	HRC37 ~ 46 (SUS304-CSP)		①	②	③	○	○	○	○	○	○	○
	03...Temper Color (Spring Steel)		HRC43 ~ 50 (Spring Steel)		Material				Dimensions code					